ABSTRACT

A metallization stack is provided for use as a contact structure in an integrated MEMS device. The metallization stack comprises a titanium-tungsten adhesion and barrier layer formed with a platinum layer formed on top. The platinum feature is formed by sputter etching the platinum in argon, followed by a wet etch in aqua regia using an oxide hardmask. Alternatively, the titanium-tungsten and platinum layers are deposited sequentially and patterned by a single plasma etch process with a photoresist mask.